West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on May 13, 2017.

Permit Number: R30-03300001-2017(MM02)
Application Received: May 18, 2021
Plant Identification Number: 03-54-033-00001
Permittee: Amsted Graphite Materials LLC
Facility Name: Anmoore Facility

Mailing Address: P.O. Box 120, Anmoore, WV 26323

Permit Action Number: MM02 Revised: March 1, 2022

Physical Location: Anmoore, Harrison County, West Virginia

UTM Coordinates: 561 km Easting • 4,345 km Northing • Zone 17

Directions: Rt 58, Philippi Pike at Anmoore, WV.

Facility Description

This facility produces specialty carbon and graphite products by forming "green" carbonaceous shapes from raw materials consisting of petroleum coke and coal tar pitch. The "green" products are baked in natural gas fired, high temperature ovens and are then treated with liquid petroleum pitch and baked again prior to being processed into graphite using electrically heated furnaces. The graphite shapes are then machined and processed into varying products which are further processed to enhance their properties prior to shipment. SIC Code: 3624 - Electronic and Other Electrical Equipment & Components – Carbon and Graphite Products.

The Modification addresses a new Ingate Process at the Amsted Graphite Materials (AGM) facility. Unlike the existing carbonaceous products currently produced by the facility, the new products (billets and stoppers) are ceramic. Most of the equipment to be used to produce these products will be purchased and installed inside existing buildings. A limited number of existing emission units will be shared with this process. The two (2) raw materials used will be natural graphite and ball clay. Both raw materials are received as solids. These materials are mixed with water to aid in producing a mixture that can be formed into the desired shapes and then heated in one of two natural gas fueled ovens to remove moisture and

prepare the shapes to be sintered in a kiln. The dried shapes are placed in crucibles with synthetic graphite particles (from the facility's existing graphite production operations) to fill the voids. These crucibles are then loaded into one of two natural gas fueled kilns for sintering. After sintering, the shapes may be machined to the desired dimensions. The ceramic pieces are then packaged for shipment to customers.

Emissions Summary

This modification results in the following emission changes:

Pollutant	Change in Emissions (TPY)
NOx	+19.42
CO	+17.36
VOCs	+1.22
PM	+1.67
PM_{10}	+1.19
PM _{2.5}	+1.19
SO_2	+0.28
HAPs	+0.22

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 2,924.99 TPY of carbon monoxide (CO), 197.29 TPY of particulate matter (PM₁₀), and 127.92 TPY of sulfur dioxide (SO₂). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Amsted Graphite Materials LLC (AGM) is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	To Prevent and Control Particulate Matter
		Air Pollution from Manufacturing Processes
		and Associated Operations
	45CSR13	NSR Permits
	45CSR30	Operating permit requirement.
State Only:	None.	

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-3039C	October 1, 2021	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

The following changes were made to the Title V permit as part of this Minor Modification:

Section 1.1. Emission Units

- Changed emission unit ID of the Dry/Cure Oven 306 to 306S, changed the emission point ID from EP-306 to 306E, and updated the design capacity to reflect changes made in R13-3039C. This change was made throughout the permit.
- Added the following equipment to the Emission units table: Erich Mixer (462S), Drying Oven (330S), Kilns (331S & 332S), Crucible load/unload station (463S), and CNC Lathe (474S).

Section 5.0 Source-Specific Requirements for Bake Process

- Added the new equipment's emission point IDs to the Section header.
- Note for Condition 5.1.1: Attachment A does not specify a PM limit for Emission Point 306E. The PM limits for 306E depend on the whether it is being used for the Ingate Production Process (condition 5.1.35) or for producing Rigid Graphite Insulation (condition 7.1.3). Both conditions streamline compliance with the PM limitation specified by 45CSR§7-4.1.
- Removed the specific Emission Point ID citations from conditions 5.1.24. and 5.1.25. All Emission units of Section 5.0 are subject to the opacity limits of 45CSR§7-3.1. and 45CSR§7-3.2 including the new equipment.
- Added new conditions for the Ingate Production Process as 5.1.35 5.1.40. Condition 5.1.35 streamlines compliance with the PM limitations specified by 45CSR§7-4.1. for the Ingate Production Process.
- Renumbered old conditions 5.1.35 5.1.37 as new conditions 5.1.41 5.1.43.
- Modified condition 5.2.1 to add the appropriate monitoring requirements for the new equipment.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 63: Subpart KKKKK National Emission Standards for Hazardous Air Pollutants For Clay Ceramics Manufacturing

Per §63.8535, subpart KKKKK only applies to major sources of HAPs. With the additional 0.22 tons per year that may be emitted due to this modification, the facility's new PTE of HAPs will be 9.23 tons per year. This is still well below the 25 tons per year total HAP threshold that would make the facility a "major source" subject to this rule.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Not Applicable for minor modifications.

Ending Date: N/A

Point of Contact

All written comments should be addressed to the following individual and office:

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41286
Robert Mullins

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.